A Project report

On

New Farming Technologies

By

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Under The Guidance of,

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Introduction:

Our project explains about the new framing technologies. This project explains how new technology will make farming smarter and more productive. These technologies reduces farmers efforts .

I have developed this application in Java,Jsp,Html ,Css and MySql.

This project gives detailed information about technologies.

Software Requirements:

Front End:	Java/J2EE Technologies(Jsp),HTML,CSS,JDBC.
Back end:	MySql.
Middleware/Server:	Apache Tomcat v7.0.
IDE:	Eclipse IDE for Java EE Developers
Browser:	Best result on Google Chrome.

Data Dictionary:

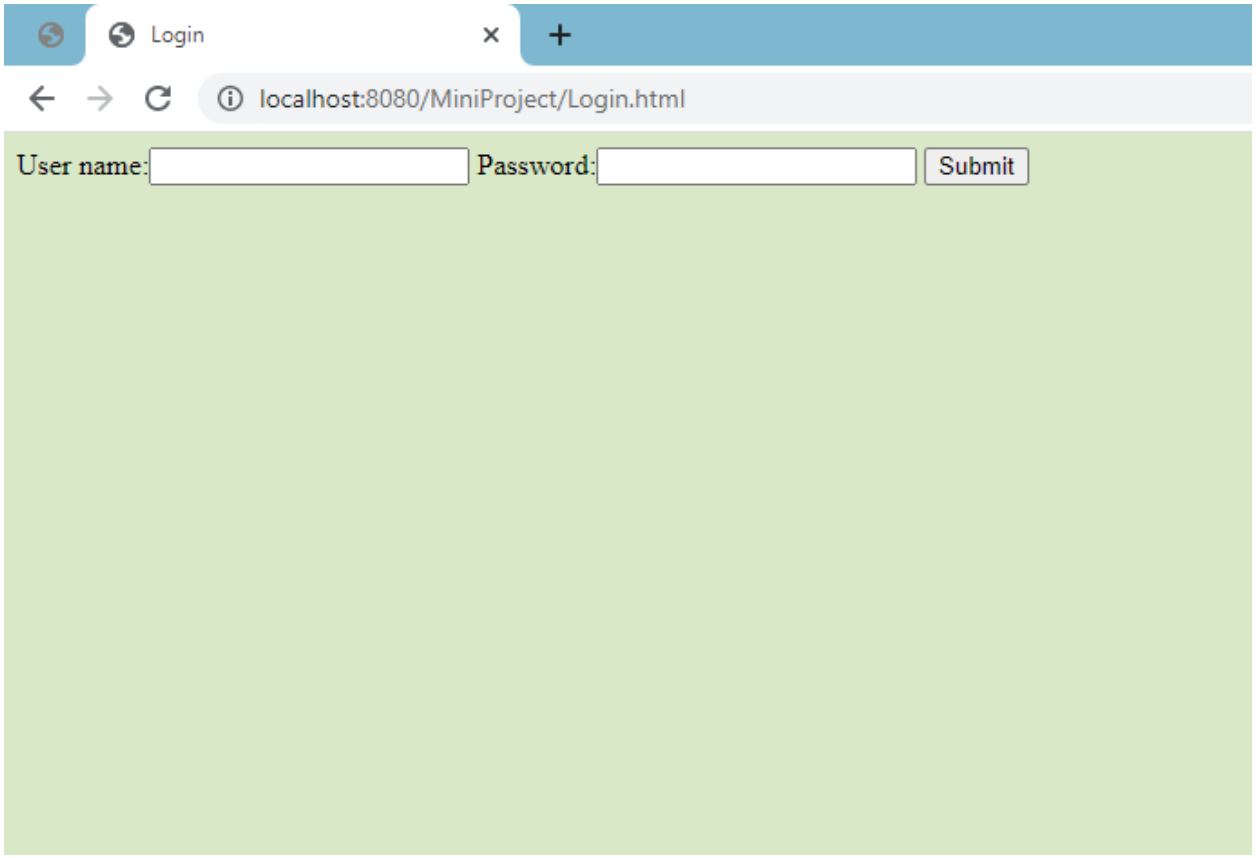
Table Name: users

```
create table users(userid varchar(20)
,password varchar(20),
fname varchar(20),
lname varchar(20),
email varchar(20));
```

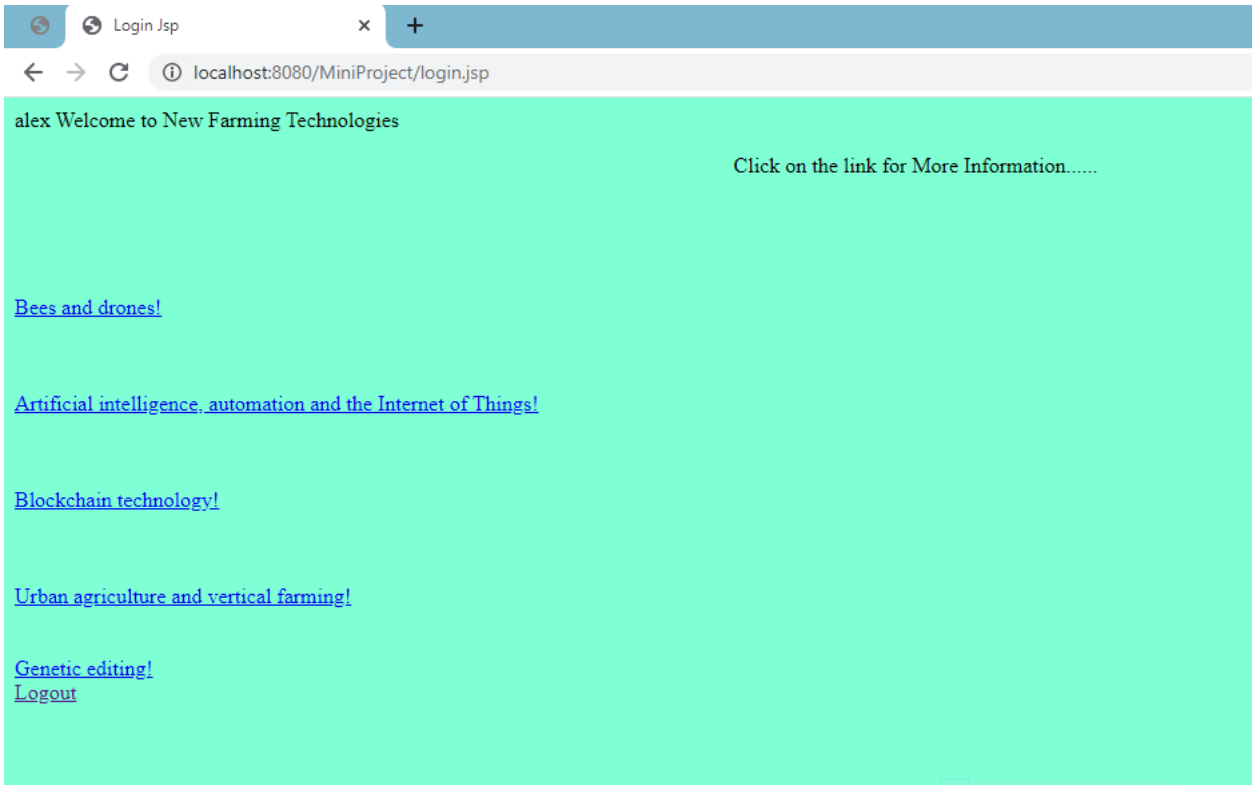
Screenshots:-

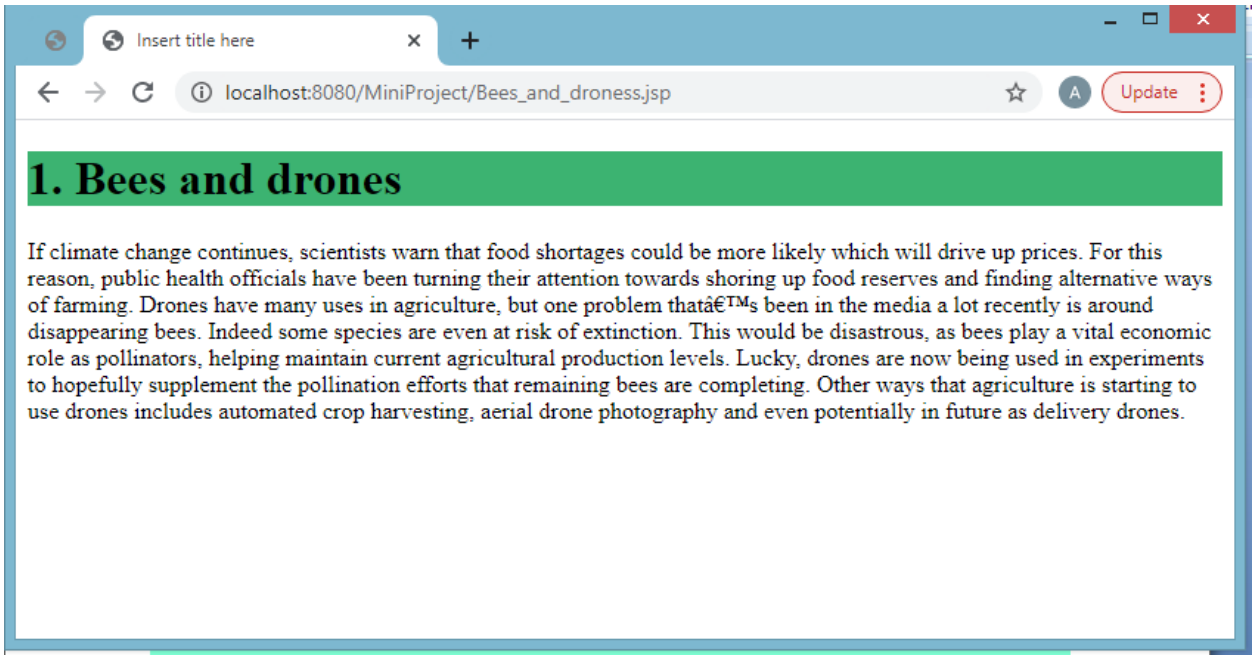
Home Page:-

LogIn Page:-


Login
localhost:8080/MiniProject/Login.html
User name:
Password:
Submit

After LogIn:-


Login Jsp
localhost:8080/MiniProject/login.jsp
alex Welcome to New Farming Technologies
Click on the link for More Information.....
Bees and drones!
Artificial intelligence, automation and the Internet of Things!
Blockchain technology!
Urban agriculture and vertical farming!
Genetic editing!
Logout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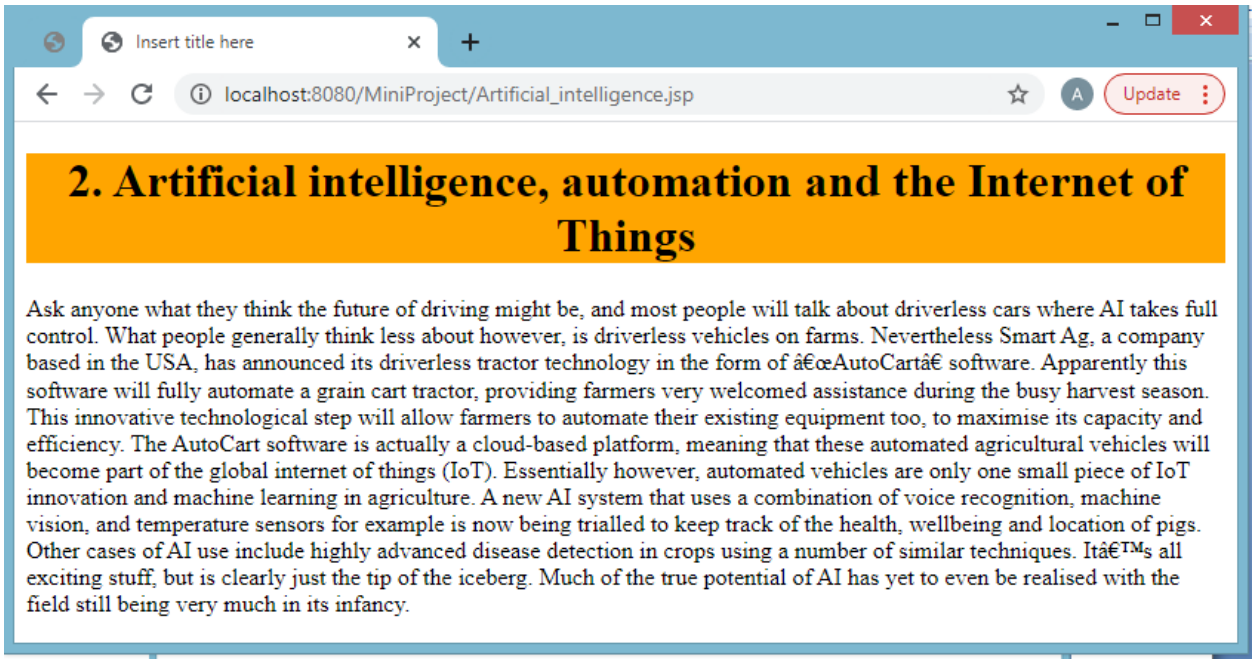
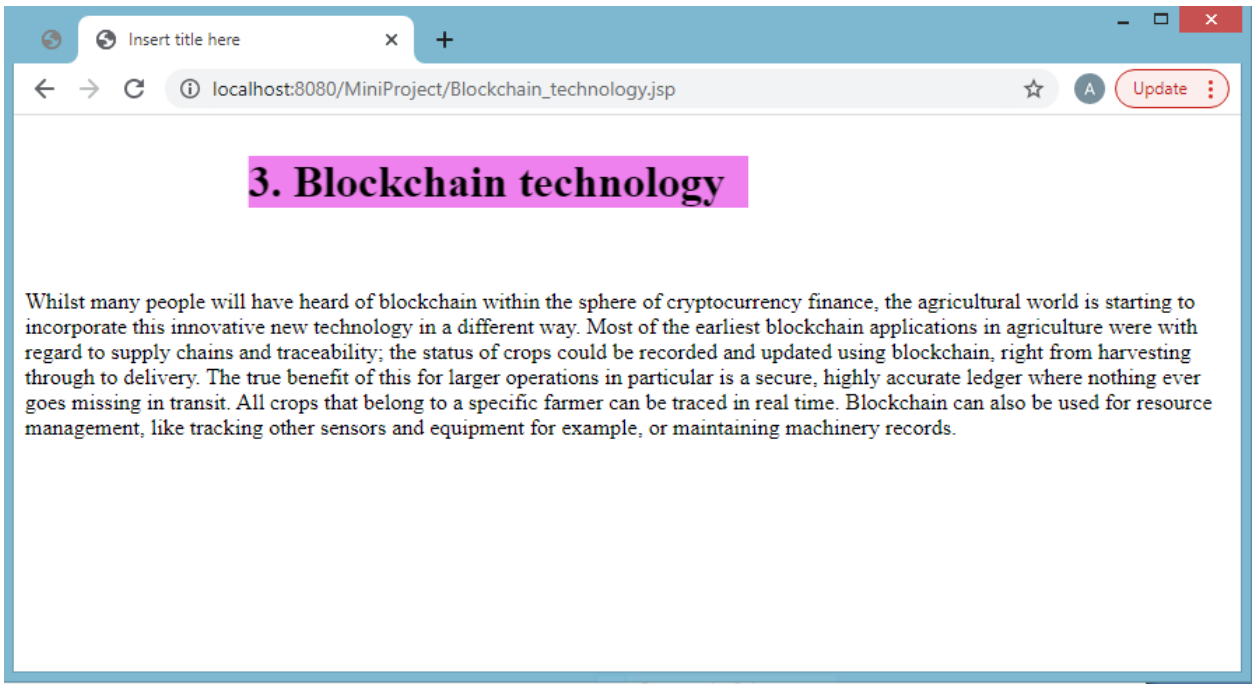
localhost:8080/MiniProject/Bees_and_droness.jsp
Update
1. Bees and drones
If climate change continues, scientists warn that food shortages could be more likely which will drive up prices. For this reason, public health officials have been turning their attention towards shoring up food reserves and finding alternative ways of farming. Drones have many uses in agriculture, but one problem thatâ€™s been in the media a lot recently is around disappearing bees. Indeed some species are even at risk of extinction. This would be disastrous, as bees play a vital economic role as pollinators, helping maintain current agricultural production levels. Lucky, drones are now being used in experiments to hopefully supplement the pollination efforts that remaining bees are completing. Other ways that agriculture is starting to use drones includes automated crop harvesting, aerial drone photography and even potentially in future as delivery drones.



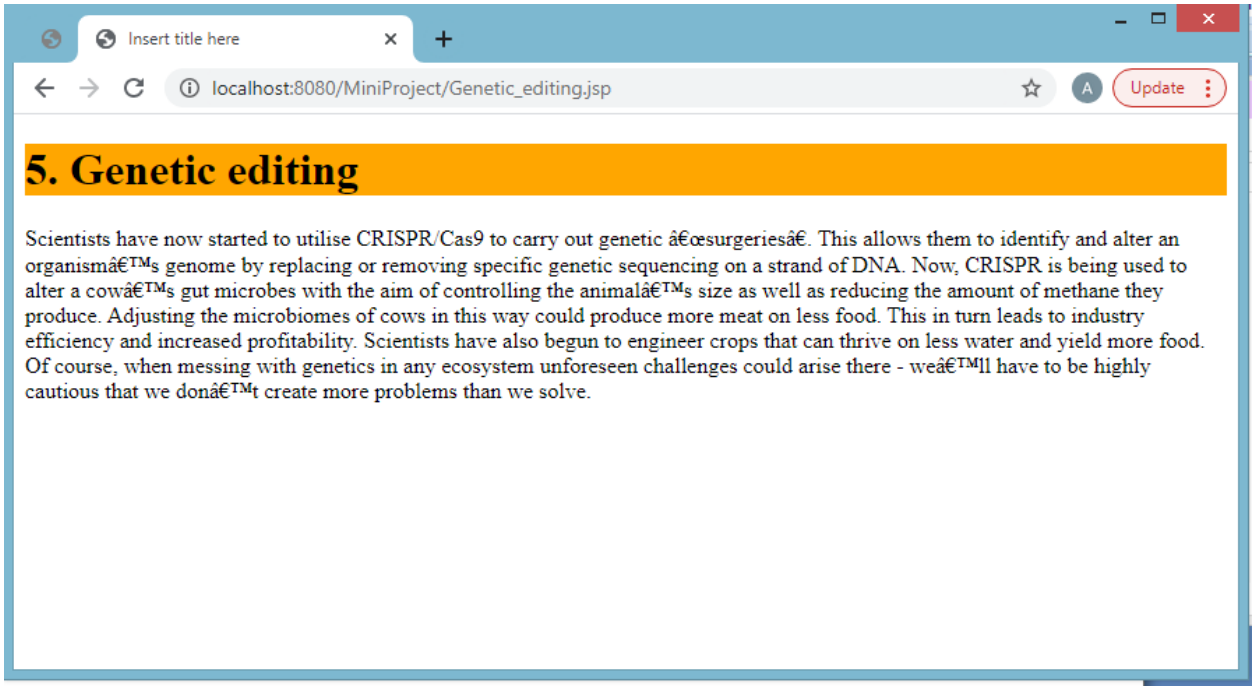
2. Artificial intelligence, automation and the Internet of Things

Ask anyone what they think the future of driving might be, and most people will talk about driverless cars where AI takes full control. What people generally think less about however, is driverless vehicles on farms. Nevertheless Smart Ag, a company based in the USA, has announced its driverless tractor technology in the form of â€œAutoCartâ€ software. Apparently this software will fully automate a grain cart tractor, providing farmers very welcomed assistance during the busy harvest season. This innovative technological step will allow farmers to automate their existing equipment too, to maximise its capacity and efficiency. The AutoCart software is actually a cloud-based platform, meaning that these automated agricultural vehicles will become part of the global internet of things (IoT). Essentially however, automated vehicles are only one small piece of IoT innovation and machine learning in agriculture. A new AI system that uses a combination of voice recognition, machine vision, and temperature sensors for example is now being trialled to keep track of the health, wellbeing and location of pigs. Other cases of AI use include highly advanced disease detection in crops using a number of similar techniques. Itâ€™s all exciting stuff, but is clearly just the tip of the iceberg. Much of the true potential of AI has yet to even be realised with the field still being very much in its infancy.



3. Blockchain technology

Whilst many people will have heard of blockchain within the sphere of cryptocurrency finance, the agricultural world is starting to incorporate this innovative new technology in a different way. Most of the earliest blockchain applications in agriculture were with regard to supply chains and traceability; the status of crops could be recorded and updated using blockchain, right from harvesting through to delivery. The true benefit of this for larger operations in particular is a secure, highly accurate ledger where nothing ever goes missing in transit. All crops that belong to a specific farmer can be traced in real time. Blockchain can also be used for resource management, like tracking other sensors and equipment for example, or maintaining machinery records.


Insert title here
localhost:8080/MiniProject/Genetic_editing.jsp
Update
5. Genetic editing
Scientists have now started to utilise CRISPR/Cas9 to carry out genetic â€œsurgeriesâ€. This allows them to identify and alter an organismâ€™s genome by replacing or removing specific genetic sequencing on a strand of DNA. Now, CRISPR is being used to alter a cowâ€™s gut microbes with the aim of controlling the animalâ€™s size as well as reducing the amount of methane they produce. Adjusting the microbiomes of cows in this way could produce more meat on less food. This in turn leads to industry efficiency and increased profitability. Scientists have also begun to engineer crops that can thrive on less water and yield more food. Of course, when messing with genetics in any ecosystem unforeseen challenges could arise there - weâ€™ll have to be highly cautious that we donâ€™t create more problems than we solve.